# NOTIFICATION OF ADDENDUM ADDENDUM NO. 1 DATED 3/25/2015

Control	0004-07-121
Project	IM 0201(188)
Highway	IH 20
County	ECTOR

#### Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an adendum notification which details the changes and the respective proposal pages which were added and/ or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

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SUBJECT: PLANS AND PROPOSAL ADDENDUMS
       PROJECT: IM 0201(188)
                                CONTROL: 0004-07-121
       COUNTY: ECTOR
       LETTING: 04/07/2015
       REFERENCE NO: 0325
                          PROPOSAL ADDENDUMS
X PROPOSAL COVER
X BID INSERTS (SH. NO.: 5
X GENERAL NOTES (SH. NO.: B,M,N
_ SPEC LIST
             (SH. NO.:
_ SPECIAL PROVISIONS:
  ADDED:
      DELETED:
  SPECIAL SPECIFICATIONS:
  ADDED:
      DELETED:
X OTHER: PLAN SHEET AND OTHER CHANGES
DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)
*****PROPOSAL COVER****
REVISED CONTRACT TO 210 WORKING DAYS
*****BID INSERTS****
REVISED QUANTITY FOR BID ITEM 502-6001
*****GENERAL NOTES****
SHEET B: ITEM 8 DELETED STANDARD WORKWEEK NOTE
SHEET B: ITEM 8 ADDED FIVE-DAY WORKWEEK NOTE
SHEET M: ITEM 681 NOTE ADDED FOR CLARIFICATION OF TEMPORARY TRAFFIC SIGNAL
SHEET N: REVISED DUE TO ADDED NOTE AS NOTED ABOVE
*****PLAN SHEETS****
SHEET 2 (INDEX OF SHEETS): ADDED NEW SHEET 17A
SHEET 6 (GENERAL NOTES): REFER TO GENERAL NOTES CHANGES AS NOTED ABOVE
SHEET 6F (GENERAL NOTES): REFER TO GENERAL NOTES CHANGES AS NOTED ABOVE
DESCRIPTION OF ABOVE CHANGES
                                                               (CONTINUED)
(INCLUDING PLANS SHEET CHANGES)
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- SHEET 7 (ESTIMATE & QUANTITY): REFER TO BID INSERT CHANGE AS NOTED ABOVE
- SHEET 17A (TRAFFIC CONTROL PLAN SEQUENCE OF CONSTRUCTION): SEGREGATED ALL PHASE NARRATIVES TO THIS SHEET, AND REVISED SEQUENCE OF CONSTRUCTION TO DELAY START OF CONSTRUCTION ON FRONTAGE ROADS
- SHEET 18 (TRAFFIC CONTROL PLAN PHASE 1): REMOVED PHASE NARRATIVE
- SHEET 19 (TRAFFIC CONTROL PLAN PHASE 1): ADDED CALLOUT FOR CONSTRUCTION OF CULVERT NO 2  $\,$
- SHEET 20 (TRAFFIC CONTROL PLAN PHASE 2): REMOVED PHASE NARRATIVE
- SHEET 22 (TRAFFIC CONTROL PLAN PHASE 3): REMOVED PHASE NARRATIVE

Control	0004-07-121
Project	IM 0201(188)
Highway	IH 20
County	ECTOR

# PROPOSAL TO THE TEXAS TRANSPORTATION COMMISSION

# 2014 SPECIFICATIONS WORK CONSISTING OF EXTEND ON/OFF RAMPS ECTOR COUNTY, TEXAS

The quantities in the proposal are approximate. The quantities of work and materials may be increased or decreased as considered necessary to complete the work as planned and contemplated.

This project is to be completed in 210 working days and will be accepted when fully completed and finished to the satisfaction of the Executive Director or designee.

Provide a proposal guaranty in the form of a Cashier's Check, Teller's Check (including an Official Check) or Bank Money Order on a State or National Bank or Savings and Loan Association, or State or Federally chartered Credit Union made payable to the Texas Transportation Commission in the following amount:

#### ONE HUNDRED THOUSAND (Dollars) ( \$100,000)

A bid bond may be used as the required proposal guaranty. The bond form may be detached from the proposal for completion. The proposal may not be disassembled to remove the bond form. The bond must be in accordance with Item 2 of the specifications.

Any addenda issued amending this proposal and/or the plans that have been acknowledged by the bidder, become part of this proposal.

By signing the proposal the bidder certifies:

- 1. the only persons or parties interested in this proposal are those named and the bidder has not directly or indirectly participated in collusion, entered into an agreement or otherwise taken any action in restraint of free competitive bidding in connection with the above captioned project.
- 2. in the event of the award of a contract, the organization represented will secure bonds for the full amount of the contract.
- 3. the signatory represents and warrants that they are an authorized signatory for the organization for which the bid is submitted and they have full and complete authority to submit this bid on behalf of their firm.
- 4. that the certifications and representations contained in the proposal are true and accurate and the bidder intends the proposal to be taken as a genuine government record.

• Signed: **			
(1)	(2)	(3)	
Print Name:			
(1)	(2)	(3)	
<b>Title:</b> (1)	(2)	(3)	
Company: (1)		• ,	
` /	1 :4 1 2 6 4 :6: 4:		

• Signatures to comply with Item 2 of the specifications.

\*\*Note: Complete (1) for single venture, through (2) for joint venture and through (3) for triple venture.

\* When the working days field contains an asterisk (\*) refer to the Special Provisions and General Notes.

# NOTICE TO CONTRACTORS

ANY CONTRACTORS INTENDING TO BID ON ANY WORK TO BE AWARDED BY THIS DEPARTMENT MUST SUBMIT A SATISFACTORY "AUDITED FINANCIAL STATEMENT" AND "EXPERIENCE QUESTIONNAIRE" AT LEAST TEN DAYS PRIOR TO THE LETTING DATE.

UNIT PRICES MUST BE SUBMITTED IN ACCORDANCE WITH ITEM 2 OF THE STANDARD SPECIFICATIONS OR SPECIAL PROVISION TO ITEM 2 FOR EACH ITEM LISTED IN THIS PROPOSAL.

	ITEM-CODE							DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	100	6002		PREPARING ROW		STA	75.000	1
				and	DOLLARS CENTS			
	104	6017		REMOVING CONC (DRIVEWA	YS) DOLLARS CENTS	SY	183.000	2
	104	6022		REMOVING CONC (CURB AN	D GUTTER) DOLLARS CENTS	LF	5,225.000	3
	104	6024		REMOVING CONC (RETAININ and	G WALLS)  DOLLARS  CENTS	SY	831.000	4
	104	6028		REMOVING CONC (MISC) and	DOLLARS CENTS	SY	18.000	5
	106	6001		OBLITERATING ABANDONED	D ROAD DOLLARS CENTS	STA	37.000	6
	110	6001		EXCAVATION (ROADWAY) and	DOLLARS CENTS	CY	31,425.000	7
	132	6003		EMBANKMENT (FINAL)(ORD	COMP)(TY B) DOLLARS CENTS	CY	20,947.000	8
	150	6002		BLADING and	DOLLARS CENTS	HR	20.000	9
	164	6036		DRILL SEEDING (PERM) (RUR	CAL) (CLAY) DOLLARS CENTS	AC	16.000	10
	216	6001		PROOF ROLLING and	DOLLARS CENTS	HR	10.000	11

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ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	247	6064		FL BS (CMP IN PLC)(TY A GR 4) (6")  DOLLA and  CENTS		1,029.000	12
	247	6389		FL BS(COMPL IN PLACE)(TY A GR4)(16'  DOLLA and  CENTS	ARS	14,024.000	13
	314	6020		EMULS ASPH (PRIME)(AE-P)  DOLLA and  CENTS		1,274.000	14
	344	6014		SUPERPAVE MIXTURES SP-B PG70-22  DOLLA and  CENTS		19,763.000	15
	344	6119		SUPERPAVE MIXTURES SP-D SAC-A PG DOLLA and CENTS	ARS	5,905.000	16
	354	6045		PLANE ASPH CONC PAV (2")  DOLLA and  CENTS		6,164.000	17
	400	6005		CEM STABIL BKFL  DOLLA and  CENTS		586.000	18
	416	6015		DRILL SHAFT (NON - REINFORCED) (12 DOLLA and CENTS	ARS	16.000	19
	416	6018		DRILL SHAFT (SIGN MTS) (24 IN)  DOLLA and  CENTS		16.000	20
	416	6029		DRILL SHAFT (RDWY ILL POLE) (30 IN)  DOLLA and  CENTS	ARS	264.000	21
	416	6032		DRILL SHAFT (TRF SIG POLE) (36 IN)  DOLLA and  CENTS		84.000	22

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ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WORI		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	416	6034		DRILL SHAFT (TRF SIG POLE) (48 IN)  DOLLARS and  CENTS		LF	25.000	23
	423	6006		RETAINING WALL (STONE) and	DOLLARS CENTS	SF	831.000	24
	432	6001		RIPRAP (CONC)(4 IN) and	DOLLARS CENTS	CY	631.000	25
	432	6045		RIPRAP (MOW STRIP)(4 IN) and	DOLLARS CENTS	CY	205.000	26
	460	6010		CMP AR (GAL STL DES 3) and	DOLLARS CENTS	LF	69.000	27
	462	6009		CONC BOX CULV (5 FT X 5 FT) and	DOLLARS CENTS	LF	1,300.000	28
	462	6010		CONC BOX CULV (6 FT X 3 FT) and	DOLLARS CENTS	LF	48.000	29
	464	6005		RC PIPE (CL III)(24 IN) and	DOLLARS CENTS	LF	647.000	30
	464	6007		RC PIPE (CL III)(30 IN) and	DOLLARS CENTS	LF	471.000	31
	465	6173		MANH (COMPL)(TY A) and	DOLLARS CENTS	EA	1.000	32
	466	6180		WINGWALL (PW - 1) (HW=5 FT) and	DOLLARS CENTS	EA	1.000	33

	ITEM-CODE							DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WORI		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	466	6181		WINGWALL (PW - 1) (HW=6 FT)		EA	1.000	34
				and	DOLLARS CENTS			
	466	6209		WINGWALL (SW - 0) (HW=6 FT) and	DOLLARS CENTS	EA	1.000	35
	467	6189		SET (TY I)(S= 5 FT)(HW= 6 FT)(6:	1) (P) DOLLARS CENTS	EA	2.000	36
	467	6391		SET (TY II) (24 IN) (RCP) (4: 1) (P) and	DOLLARS CENTS	EA	2.000	37
	467	6395		SET (TY II) (24 IN) (RCP) (6: 1) (P) and	DOLLARS CENTS	EA	2.000	38
	467	6423		SET (TY II) (30 IN) (RCP) (6: 1) (P) and	DOLLARS CENTS	EA	4.000	39
	467	6534		SET (TY II) (DES 3) (CMP) (4: 1) (0 and	C) DOLLARS CENTS	EA	5.000	40
	467	6536		SET (TY II) (DES 3) (CMP) (6: 1) (0 and	C) DOLLARS CENTS	EA	1.000	41
	496	6006		REMOV STR (HEADWALL) and	DOLLARS CENTS	EA	6.000	42
	496	6007		REMOV STR (PIPE) and	DOLLARS CENTS	LF	392.000	43
	500	6001		MOBILIZATION and	DOLLARS CENTS	LS	1.000	44

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ALT	ITEM NO	DESC CODE	S.P. NO.		UNIT BID PRICE ONLY. WRITTEN IN WORDS		APPROX QUANTITIES	USE ONLY
	502	6001		BARRICADES, SIGNS AND TRAIDLING	FFIC HAN-	МО	11.000	45
				and	DOLLARS CENTS			
	506	6042	001	BIODEG EROSN CONT LOGS (IN	DOLLARS	LF	775.000	46
				and	CENTS			
	506	6043	001	BIODEG EROSN CONT LOGS (R)	EMOVE) DOLLARS CENTS	LF	775.000	47
					CENTS			
	508	6001		CONSTRUCTING DETOURS and	DOLLARS CENTS	SY	391.000	48
	512	6001		PORT CTB (FUR & INST)(SGL SL and	OPE)(TY 1) DOLLARS CENTS	LF	7,640.000	49
	512	6049		PORT CTB (REMOVE)(SGL SLP)(and	TY 1) DOLLARS CENTS	LF	7,640.000	50
	529	6008		CONC CURB & GUTTER (TY II)	DOLLARS CENTS	LF	9,890.000	51
	529	6021		CONC CURB & GUTTER (SLOTT and	ED) DOLLARS CENTS	LF	234.000	52
	530	6004		DRIVEWAYS (CONC)	DOLLARS CENTS	SY	183.000	53
	533	6001		RUMBLE STRIPS (SHOULDER) and	DOLLARS CENTS	LF	1,489.000	54

	ITI	EM-COD	E					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY WRITTEN IN WORDS		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	540	6002			OT) OLLARS ENTS	LF	3,555.000	55
	540	6016			AL SEC- OLLARS ENTS	EA	4.000	56
	544	6001			ISTALL) OLLARS ENTS	EA	12.000	57
	545	6001			OLLARS ENTS	EA	4.000	58
	545	6003			SET) OLLARS ENTS	EA	4.000	59
	545	6005			OLLARS ENTS	EA	4.000	60
	610	6009			E) OLLARS ENTS	EA	13.000	61
	610	6047			S OLLARS ENTS	EA	1.000	62
	610	6050			S OLLARS ENTS	EA	32.000	63
	618	6023			OLLARS ENTS	LF	10,262.000	64

	ITI	EM-COD	E					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WOR		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	618	6029		CONDT (PVC) (SCH 40) (3") and	DOLLARS CENTS	LF	910.000	65
	618	6047		CONDT (PVC) (SCH 80) (2") (BO and	RE) DOLLARS CENTS	LF	2,075.000	66
	618	6054		CONDT (PVC) (SCH 80) (3") (BO	RE) DOLLARS CENTS	LF	665.000	67
	620	6008		ELEC CONDR (NO.8) INSULATE	D DOLLARS CENTS	LF	950.000	68
	620	6009		ELEC CONDR (NO.6) BARE and	DOLLARS CENTS	LF	14,512.000	69
	620	6010		ELEC CONDR (NO.6) INSULATE	D DOLLARS CENTS	LF	24,044.000	70
	624	6002		GROUND BOX TY A (122311)W/	APRON DOLLARS CENTS	EA	37.000	71
	628	6045		ELC SRV TY A 240/480 060(NS)S	S(E)SP(O) DOLLARS CENTS	EA	3.000	72
	636	6002		ALUMINUM SIGNS (TY G) and	DOLLARS CENTS	SF	250.250	73
	644	6001		IN SM RD SN SUP&AM TY10BW	VG(1)SA(P) DOLLARS CENTS	EA	6.000	74
	644	6004		IN SM RD SN SUP&AM TY10BW	VG(1)SA(T) DOLLARS CENTS	EA	36.000	75

	ITEM-CODE							DEPT
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONI WRITTEN IN WORD		UNIT	APPROX QUANTITIES	USE ONLY
	644	6007			G(1)SA(U) DOLLARS CENTS	EA	3.000	76
	644	6076		REMOVE SM RD SN SUP&AM	DOLLARS CENTS	EA	35.000	77
	647	6001			DOLLARS CENTS	LB	1,395.500	78
	647	6003			DOLLARS CENTS	EA	3.000	79
	658	6015			F)GF1 DOLLARS CENTS	EA	57.000	80
	658	6047			ND DOLLARS CENTS	EA	10.000	81
	662	6001		WK ZN PAV MRK NON-REMOV (	W)4"(BRK) DOLLARS CENTS	LF	715.000	82
	662	6002		WK ZN PAV MRK NON-REMOV (	W)4"(DOT) DOLLARS CENTS	LF	385.000	83
	662	6004			W)4"(SLD) DOLLARS CENTS	LF	31,650.000	84
	662	6012		WK ZN PAV MRK NON-REMOV (	W)8"(SLD) DOLLARS CENTS	LF	8,820.000	85
	662	6016			W)24"(SLD) DOLLARS CENTS	LF	260.000	86

	ITI	EM-COD	E				DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	662	6029		WK ZN PAV MRK NON-REMOV(W)(WORD)  DOLLARS  and  CENTS	EA	12.000	87
	TRI)		DOLLARS	EA	48.000	88	
	662	6034		WK ZN PAV MRK NON-REMOV (Y)4"(SLD)  DOLLARS and  CENTS	LF	32,320.000	89
	662	6039		WK ZN PAV MRK NON-REMOV (Y)12"(SLD) DOLLARS and CENTS	LF	625.000	90
	662	6080		WK ZN PAV MRK REMOV (W)(ARROW)  DOLLARS  and  CENTS	EA	12.000	91
	662	6109		WK ZN PAV MRK SHT TERM (TAB)TY W DOLLARS and CENTS	EA	2,637.000	92
	666	6006		REFL PAV MRK TY I (W)4"(DOT)(100MIL)  DOLLARS and  CENTS	LF	385.000	93
	666	6036		REFL PAV MRK TY I (W)8"(SLD)(100MIL)  DOLLARS and  CENTS	LF	8,820.000	94
	666	6048		REFL PAV MRK TY I (W)24"(SLD)(100MIL)  DOLLARS and  CENTS	LF	260.000	95
	666	6102		REF PAV MRK TY I(W)36"(YLD TRI)(100MIL)  DOLLARS and  CENTS	EA	24.000	96

	ITI	EM-COD	E					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	666	6141		REFL PAV MRK TY I (Y)12"(SLD and	(100MIL) DOLLARS CENTS	LF	625.000	97
	666	6300		RE PM W/RET REQ TY I (W)4"(B	RK)(100MIL) DOLLARS CENTS	LF	715.000	98
	666	6303		RE PM W/RET REQ TY I (W)4"(S) and	LD)(100MIL) DOLLARS CENTS	LF	24,950.000	99
	666	6315		RE PM W/RET REQ TY I (Y)4"(SI and	PM W/RET REQ TY I (Y)4"(SLD)(100MIL)  DOLLARS  CENTS		26,560.000	100
	668	6077		PREFAB PAV MRK TY C (W) (AR	EFAB PAV MRK TY C (W) (ARROW)  DOLLARS CENTS		12.000	101
	668	6085		PREFAB PAV MRK TY C (W) (WC	DRD) DOLLARS CENTS	EA	12.000	102
	672	6007		REFL PAV MRKR TY I-C and	DOLLARS CENTS	EA	92.000	103
	672	6009		REFL PAV MRKR TY II-A-A and	DOLLARS CENTS	EA	610.000	104
	672	6010		REFL PAV MRKR TY II-C-R and	DOLLARS CENTS	EA	384.000	105
	680	6003		INSTALL HWY TRF SIG (SYSTE) and	M) DOLLARS CENTS	EA	2.000	106
	681	6001		TEMP TRAF SIGNALS	DOLLARS CENTS	EA	2.000	107

	ITEM-CODE							DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.		UNIT BID PRICE ONLY. WRITTEN IN WORDS			DEPT USE ONLY
	682	6001		VEH SIG SEC (12")LED(GRN)		EA	4.000	108
				and	DOLLARS CENTS			
	682	6002		VEH SIG SEC (12")LED(GRN ARV	W) DOLLARS CENTS	EA	14.000	109
	682	6003		VEH SIG SEC (12")LED(YEL)	DOLLARS CENTS	EA	12.000	110
	682	6004		VEH SIG SEC (12")LED(YEL ARV	V) DOLLARS CENTS	EA	14.000	111
	682	6005		VEH SIG SEC (12")LED(RED) and	DOLLARS CENTS	EA	8.000	112
	682	6006		VEH SIG SEC (12")LED(RED ARV	V) DOLLARS CENTS	EA	14.000	113
	682	6029		BACK PLATE (12")(3 SEC)ALUM and	DOLLARS CENTS	EA	21.000	114
	684	6014		TRF SIG CBL (TY A)(12 AWG)(9 and	CONDR) DOLLARS CENTS	LF	3,540.000	115
	684	6030		TRF SIG CBL (TY A)(14 AWG)(4 and	CONDR) DOLLARS CENTS	LF	1,210.000	116
	686	6033		INS TRF SIG PL AM(S)1 ARM(32 and	DOLLARS CENTS	EA	1.000	117
	686	6037		INS TRF SIG PL AM(S)1 ARM(36 and	DOLLARS CENTS	EA	1.000	118

	ITI	ITEM-CODE					DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	686	6039		INS TRF SIG PL AM(S)1 ARM(36')LUM  DOLLARS and  CENTS	EA	1.000	119
	686	6045		INS TRF SIG PL AM(S)1 ARM(44')  DOLLARS and  CENTS	EA	2.000	120
	686	6055		INS TRF SIG PL AM(S)1 ARM(50')LUM  DOLLARS  and  CENTS	EA	1.000	121
	690	6033		REMOVAL OF TRAFFIC SIGNAL POLE FND DOLLARS and CENTS	LF	12.000	122
	690	6051		REMOVAL OF SIGNAL POLE ASSM DOLLARS and CENTS	EA	6.000	123
	6001	6002		PORTABLE CHANGEABLE MESSAGE SIGN DOLLARS and CENTS	EA	2.000	124
	6002	6003		VIVDS SET-UP SYSTEM  DOLLARS and  CENTS	EA	2.000	125
	6002	6005		VIVDS COMMUNICATION CABLE (COAXIAL) DOLLARS and CENTS	LF	4,080.000	126
	6055	6001		TMSP RADAR SPEED CONTROL MONITOR DOLLARS and CENTS	EA	6.000	127
	6058	6001		BBU SYSTEM (EXTERNAL BATT CABINET) DOLLARS and CENTS	EA	2.000	128
	6079	6001		AUTO PORT SMRT TRF MONITOR SYS  DOLLARS and  CENTS	DAY	600.000	129

	ITEM-CODE						DEPT
ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS		APPROX QUANTITIES	USE ONLY
	6083	6001		VIDEO IMAGING AND RAD VEH DETECTION SYS  DOLLARS and CENTS	EA	8.000	130
	6084	6001		MODIFY EXISTING ELECTRICAL SERVICE DOLLARS and CENTS	EA	1.000	131

Highway: IH 20

## **Material Specification Information**

# **Grading Requirements**

<u>Item</u>	Description	Grading Requirements		Soil	1	Wet	
		Percent Retained – Sieves		Const	tants	Ball	
				L.L.	P.I.	Mill	
				Max. N	<u>Лах</u> .	Max.	
		1-3/4" 7/8" 3/8"	#40				
247	Type A GR	4 0-3 10-35 20-55	65-85	40	12	45	

The maximum increase in material passing the number 40 sieve resulting from the wet ball mill test shall not exceed 20%.

Clean all proposed structures of silt and debris by the completion of the project.

#### **Item 5: Control of the Work**

Special provision for utilities exists on this project.

For this project establish a true and correct alignment with a transit or by other approved methods.

The existing alignment is the control for the Contractor staking. Establish reference points for the control prior to removing the existing surface.

Use Method C for construction surveying.

In the event the finished surface does not conform to the typical sections or does not ride to the satisfaction of the Engineer, rework the unsatisfactory area to the limits necessary and place construction stakes at closer intervals as directed. Provide the staking, personnel and equipment necessary to attain a satisfactory riding surface.

In curves and superelevation sections, place construction stakes at intervals of 50 feet along the centerline and at the crownline and quarter points of the typical sections. In the event a satisfactory riding surface cannot be constructed, place additional staking as directed.

#### **Item 7: Legal Relations and Responsibilities**

Restrict storage of equipment and materials to approved areas. The Engineer will not approve storage in any TxDOT yard.

Properly dispose of any waste generated from servicing equipment on the project.

County: Ector Control: 0004-07-121 Highway: IH 20

If access to the project is required through a new or unapprove

If access to the project is required through a new or unapproved driveway (i.e. material source, stockpile location, field office, etc.), obtain an approved "Permit To Construct Access Driveway Facilities On Highway Right Of Way" (TxDOT Form 1058) before beginning any construction operations.

Direct attention to the presence of existing utilities (Public, Private and TxDOT) throughout the project. Prior to any excavation, investigate to determine utility locations within the project right-of-way, and contact TxDOT Odessa traffic operations shop at 432-498-4682, to investigate the location of any TxDOT utility. Exercise caution when excavating in areas where investigations have determined that utilities exist.

# **Item 8: Prosecution and Progress**

The following portions of the plans may affect the Contractor's planned construction sequencing. Direct attention to the appropriate plan sheet or standard sheet.

- -Traffic Control Plan.
- -Storm Water Pollution Prevention Plan.
- -Environmental Permit, Issues and Commitments (EPIC).

Maintain ingress and egress to side streets and private property at all times.

Maintain ingress and egress to the frontage roads at all times.

Work sequence shall begin with installation of Item 628 "Electrical Services". This will allow TxDOT time to coordinate with and provide lead-time for power utility companies during the establishment of proposed electrical service.

Working days will be computed and charged in accordance with article 8. 3.1.1. "Five-Day Workweek."

# **Item 100: Preparing Right Of Way**

It is the intent on the plans to prepare only that portion of the right-of-way necessary for construction. Do not disturb natural vegetation and trees wherever possible.

#### **Item 110: Excavation**

In all excavated areas, broom the existing base or subgrade to remove any loose material. This work is considered subsidiary to this Item.

Before excavation and embankment operations begin, windrow all topsoil (approx. 4 inches) to be reused on side slopes or behind the proposed curb and gutter. This work is subsidiary to Item 110, "Excavation" and Item 132, "Embankment".

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Start excavation when a mix design for hot mix asphalt Type "SP-B" has been accepted.

Determine all excavated areas by the following day's production of asphalt stabilized base or HMAC Type "SP-B". Thus, the removal and placement of material will be on a two (2) day cycle. The first day will be for the removal of material, the second day will be for the placement of new material. At the end of the second day inlay all excavated areas to the specified depth with asphalt stabilized base material or HMAC Type "SP-B" as directed.

#### Item 132: Embankment

For all material with a plasticity index of less than 20, use test method Tex-113-E in lieu of test method Tex-114-E for determining the percent of density.

Material quality test requirements will be waived for material excavated from the R.O.W. on this project and utilized in embankment.

Shoulder up at night where the proposed ramps connect onto the existing frontage roads.

# **Item 164: Seeding For Erosion Control**

Disk areas to be seeded to a depth of four inches (4") to allow good contact between seeds and the soil. In all areas to be drill seeded, use a pasture or rangeland type seed drill. Use separate boxes on the drill to apply the fertilizer and the seed. Before planting operations begin, furnish seed tags from the seed supplier. These tags must show the percent purity, percent germination, and the date the seed was harvested. Submit these tags to the district vegetation manager for verification of appropriate pounds P.L.S./acre rates.

Uniformly distribute the seed as herein described.

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#### Seed Mix:

Variety*	Lbs. P.L.S./AC**		Species
Bouteloua Gracilis Blue Grama	Hachita	1.00	
Bouteloua Curtipendula	Premier	2.25	
Sideoats Grama Sporobolus Cryptandrum		0.34	
Sand Dropseed Eragrostis Trichodes		2.00	
Sand Lovegrass  ***Triticum Aestivum		45.00	
Red Winter Wheat		<del>4</del> 5.00	

<sup>\*\*\*</sup> If seeding is performed between October 1<sup>st</sup> And February 28<sup>th</sup>, include red Winter wheat in the seeding.

If a grass variety is not available, submit an available substitution to the Engineer for approval. Permission for substitution will only be granted after the Engineer is satisfied that the recommended varieties are not available. Deliver all fertilizer in bags or containers clearly labeled showing the analysis. The preferred analysis is 18-3-4. Apply the fertilizer at a rate which will not be less than 100 pounds of nitrogen per acre. Apply fertilizer in conjunction with seeding.

#### Item 247: Flexible Base

Maintain moisture during compaction as directed by the Engineer. Determine the moisture content of the material in accordance with Tex-115-E or Tex-103-E as directed by the Engineer.

# **Item 344: Performance-Designed Mixtures**

# Binder:

Provide a binder that has a performance grade of 70 -22 (PG 70 -22) for the "SP-B and SP-D" Mix.

# Aggregate Quality:

Furnish Class "A" aggregate for the Type "SP-D" Mix. Furnish Class "B" aggregate for the Type "SP-B" Mix.

Furnish aggregates that meet SAC requirements for the shoulders and/or ramps.

<sup>\*\*</sup>Lbs. P.L.S./Ac. = Pounds of pure live seed per acre

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Magnesium sulfate soundness loss will not be greater than 20 percent when Class "A" aggregate is required.

# Mixture Design:

Design a mixture with a gradation that has stone on stone contact and passes below the reference zone.

Test method Tex-530-C (Boil Test) will not be required.

## Placement:

Semi-trailer type vehicles are specifically prohibited from dumping directly into the finishing machine for the finished surface. This type of haul truck will be allowed to unload into the finishing machine if the trailer is equipped with an auger slatted chain or another approved conveyor.

Place mixture when the roadway surface temperature is equal to or higher than the temperatures listed in table 1 (shown below), unless otherwise approved or shown on the plans. Measure the roadway surface temperature with a handheld infrared thermometer. Unless otherwise shown on the plans, place mixtures only when weather conditions and moisture conditions of the roadway surface are suitable in the opinion of the Engineer.

Table 1
Minimum Pavement Surface Temperatures

		Minimum Pavement Surface		
		Temperatures		
		In Degrees Fahrenheit		
Specification Item Number	High Temperature	Subsurface Layers or Night Paving	Surface Layers Placed In	
Tem rameer	Binder Grade	Operations	Daylight Operations	
Itama 240, 241 %	PG 64	45	50	
Items 340, 341 & 344	PG 70	55	60	
344	PG 76	60	60	
Items 342 and 346	PG 76	65	70	

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# **Item 354: Planing and Texturing Pavement**

Unused planed material will be the Contractors property. Dispose of this material in accordance with applicable federal, state, and local regulations.

Variations in depth of  $\pm -\frac{1}{2}$  inch are subsidiary to this Item.

#### Item 400: Excavation and Backfill for Structures

Aggregate for cement stabilized backfill will be an approved material.

# **Item 421: Hydraulic Cement Concrete**

Concrete trucks shall be wasted or washed out in locations designated by the project Engineer. The locations shall be protected by a berm sufficient to contain all waste and wash water. Wash water shall not be allowed to enter any storm drainage system or waterway.

Furnish disposable 4" cylinder molds and caps that meet testing tolerances.

The Engineer will provide strength testing equipment for acceptance testing.

Within seven (7) days after concrete has been placed for foundations for traffic signals, roadway illumination assemblies, or high mast illumination assemblies, provide a rub finish for exposed surfaces in accordance with Item 427, Surface Finishes For Concrete, special surface finishes.

Furnish Type II or IP Cement.

All plants and trucks will be inspected and approved by the Engineer in lieu of the NRMCA or non-department Engineer sealed certifications. The criteria and frequency of the Engineer approval of plants and trucks is the same used for NRMCA certification.

Entrained air is required in all slip formed concrete, but is not required for other structural concrete. Adjust the dosage of air entraining agent for low air content as directed by the Engineer.

# Item 432: Riprap

Use approved expansion joint material and place between the proposed riprap and curb and gutter.

Reinforce all riprap on this project with no. 3 bars spaced 12 inches O.C.B.W. or No. 4 bars spaced at 18 inches O.C.B.W.

Broom finish all riprap on this project unless otherwise directed.

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# **Item 464: Reinforced Concrete Pipe**

At locations where existing culverts are cut, use Class "A" concrete to patch the areas at the joint between the new construction and the existing structure.

# **Item 467: Safety End Treatment**

Provide shop drawings for pipe runners.

# Item 502: Barricades, Signs, and Traffic Handling

Stop equipment for traffic when crossing any traffic lanes. Furnish flaggers to warn equipment operators of approaching traffic, unless otherwise directed.

Relocate or remove temporary signs as necessary. This work is considered subsidiary to various bid Items.

Use an advanced warning flashing arrow panel for the closing of traffic lanes. Provide one standby unit in good working condition at the job site ready for immediate use.

Keep all barricades and construction signs up and in place until partial acceptance is complete. Maintain "No Center Stripe", "Do Not Pass" and "Pass with Care" signs until the permanent lane markings have been placed and accepted.

Place orange fencing around sidewalk, wheelchair ramps and other pedestrian areas that pose a hazard to pedestrian traffic as directed.

Use shoulder drop-off (CW8-9A) signs during construction when shoulder drop-off conditions are 3 inches or greater or as directed. Placement shall be in accordance with the "Texas Manual on Uniform Traffic Control Devices".

This project has a regulatory work zone speed reduction within the project limits. The work zone speed limit is reduced from 75 mph to 55 mph on mainlanes and from 55 mph to 45 mph on frontage roads. Placement of speed reduction zone signs shall comply with BC(3)-14. Speed resumption sign(s) is required at the end of a speed reduction zone. Place chevrons, at a minimum, on every other drum used for outsides of curves, merging tapers and shifting tapers.

Vertical panels shall be self righting.

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible

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Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

# Item 506: Temporary Erosion, Sedimentation, and Environmental Controls

The total disturbed area for this project is 27.148 acres. The disturbed area in this project, all project locations in the contract, and Contractor project specific locations (PSLS), within 1 mile of the project limits, for the contract will further establish the authorization requirements for storm water discharges. The department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain any required authorization from the TCEQ for any Contractor PSLS for construction support activities on or off row. When the total area disturbed for all projects in the contract and PSLS within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI for PSLS on the row to the Engineer (to the appropriate MS4 operator when on an Off-State System Route).

Upon acceptance of the project, all SWP3 devices will become property of the state and maintenance responsibility is transferred to the state until final stabilization is attained.

# Item 529: Concrete Curb, Gutter, and Combined Curb and Gutter

Use and place approved expansion joint material between the existing curb and the proposed curb and at least every 100 feet in the proposed curb sections.

#### **Item 585: Ride Quality For Pavement Surfaces**

Use surface test Type "A" to evaluate ride quality of travel lanes in accordance with Item 585, "Ride Quality for Pavement Surfaces."

# **Item 610: Roadway Illumination Assemblies**

Changes in the locations of poles, conduit, pull boxes, or other items as shown on the plans may be made in those instances deemed necessary, or when requested by the Contractor and approved.

The Roadway Illumination Pole (RIP-11) standard details were developed for installations in locations where the 3-second gust basic maximum wind speed is 110 mph, and where the elevation of the base of the pole is less than (i.e. not more than) 25' above the elevation of surrounding terrain, in accordance with the "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals," 4<sup>th</sup> Edition (2001) (AASHTO Design Specifications). For poles to be installed in regions where the maximum basic wind speed

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exceeds 110 mph or to be mounted more than 25' above the surrounding terrain, the contractor shall provide poles meeting the following requirements:

A. **Submittals.** Following the electronic shop drawing submittal process (see ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/bridge/e\_submit\_guide.pdf), the contractor shall submit to the Engineer, for approval, fabrication drawings and calculations for the poles. The drawings and calculations shall be sealed by a Texas registered or licensed professional engineer (P.E.).

B. Luminaire Structural Support Requirements. Lighting poles, arms, and anchor bolt assemblies shall have a 25 year design life to safely resist dead loads, ice loads and the required basic wind speeds at the location of installation in accordance with the current edition of the AASHTO Design Specifications. For transformer base poles, the fabricator shall include transformer base and connecting hardware in calculations and shop drawing submittals. All transformer bases shall have been structurally tested to resist the theoretical plastic moment capacity of the pole. Certification of the plastic moment load test and FHWA breakaway requirement test of the model of base being furnished shall be submitted with the shop drawings. Shop drawings shall show breakaway base model number, and manufacturer's name and logo. Manufacturer's shop drawings shall include the ASTM designations for all materials to be used.

#### Item 618: Conduit

Place a single continuous piece of warning tape in accordance with this Item along the entire length of each underground conduit installation. Locate warning tape approximately twelve inches above conduit as indication that a buried electrical line exists below the tape. Cement stabilized backfilled conduit is exempt from this requirement. Comply with warning tape requirements for any installation of buried conduit, including portions of conduit located outside of cement stabilized backfill.

When trenched conduit is proposed beneath roadways under construction, install conduit after grading operations have been completed and before any surfacing begins at that location.

When shown on the plans as bored conduit, install conduit by an approved directional boring method.

Maintain a minimum 24" depth from finish grade to top of conduit for conduit proposed beneath pavement.

Use an approved ditching method. Place and backfill conduit proposed beneath existing pavement in accordance with the section shown in the plans. Schedule and complete work so that all lanes open to traffic at night.

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For conduit raceways that are intended to remain empty or unused, extend the lower end of conduit from the face of the foundation to a minimum of 1' beyond the edge of the foundation or the riprap apron, whichever is farthest, and use conduit cap fittings for both ends of conduit. Do not glue caps or use duct tape when capping ends of conduit raceways that are intended to remain empty. Prevent dirt and debris from entering raceways during construction by temporarily capping both ends of open raceways. Other than conduit raceways that are intended to remain unused, fit each exposed end of raceways with a bushing. Where steel raceway is used, install a ground-type bushing and connect the bushing and ground rod with a bonding jumper.

#### **Item 620: Electrical Conductors**

In accordance with ED(3), electrical details-conductors, identify the conductors of each branch circuit on this project with permanent non-metallic tags at every accessible location. Fasten each tag to the conductors with two plastic straps. Match tag numbers for branch circuits with circuit numbers as shown on the plans.

Perform electrical work as required by Item 7.19 of the current standard specification book and any special provisions to Item 7.

Do not exceed four hundred and fifty feet (450') between ground boxes where conduit and conductor is used.

All conductor removed on project will become property of the Contractor. Contractor is responsible for proper disposal of conductor.

#### **Item 628: Electrical Services**

Initiate and complete the construction of all electrical services at the earliest possible time to facilitate coordination with and lead-time for power utility companies in the establishment of proposed electrical services.

Before construction or installation of any electrical service(s) on this project, contact TxDOT Odessa District Traffic Operations at (432) 498-4690 to facilitate coordination with the appropriate energy company or companies.

Permanently mark the physical address of any proposed electrical service on the respective meter base lid. Establish the physical location of the proposed electrical service to enable the Engineer to obtain and provide the respective physical address. Use one of two methods for permanent marking. For the preferred method of marking, use an approved die-stamp, with a minimum ½" height of alpha-numeric characters and stamp physical address on meter base lid. After stamping, apply coating of zinc-rich paint to the stamped area. Do not damage meter base. Replace meter base if determined by the Engineer as damaged or unacceptable. No additional compensation will be made for replacement of meter bases in the event that an unacceptable

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determination is made. When approved, use an alternate method of marking by providing a brass or aluminum plate tag with the physical address embossed by a machine-stamp process. Affix this tag to the meter base by a method approved by the Engineer. Provide a sample of a stamped plate tag for approval of this alternate method. Whether using the preferred or alternate method, produce a permanent and legible marking on the meter base lid before initiation of electrical service. Materials, labor, tools, equipment and incidentals necessary to complete this work will be considered as subsidiary to Item 628, electrical services.

Service enclosures and photocells from pre-approved sources will not be subject to the catalog cut sheet requirements of electrical detail standards. Notify the Engineer when pre-approved service enclosures and/or photocells will be supplied, and provide written documentation of manufacturer, brand, type, and model of service enclosure to be used prior to beginning any electrical service construction.

For incidental material and parts necessary for construction of electrical services, including the service entrance weatherhead, rigid metal conduit (RMC) and PVC conduit, conduit fittings, service conductors, circuit breakers, ground rods and clamps, grounding bushing (s), and mounting hardware including straps and channel brackets for conduit support, furnish products and/or materials that comply with the plans and specifications. Prior to construction of any electrical service, submit to the Engineer respective catalog cut sheets for incidental materials and parts. Electrical services constructed of materials or parts which do not comply with the plans and specifications will be cause for rejection of a portion or all of the work.

Photocell shall face north when practicable.

#### Item 644: Small Roadside Sign Supports and Assemblies

All new sign supports for stop and yield signs will have a 12" red strip of Type C high specific intensity reflective tape. Place the top of the tape 4' above the edge of the roadway. This work will not be paid for directly and will be subsidiary to the pertinent bid Item.

For standard small sign details and dimensions, refer to the "Standard Highway Sign Designs For Texas (SHSD)"; a supplement to the Texas Manual On Uniform Traffic Control Devices (TMUTCD)".

# Item 658: Delineator and Object Marker Assemblies

Delineator and object marker assembly posts shall be composed of post-consumer recycled materials. Embedded stub shall be perforated square tubing.

### **Item 662: Work Zone Pavement Markings**

Materials used for non-removable work zone pavement markings will be paint and beads or other approved materials.

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# Item 680: Installation of Highway Traffic Signals

Wire signal installations to operate in accordance with the phase diagrams shown in the plans. Set time intervals as directed.

Provide an approved technician who is available at all times by an on-call basis for maintenance of any installed signal equipment during the period of time in which installed signals are operating, including the test period for this project.

Provide a minimum length of 24" for each signal cable in each pull box and signal pole. All conductors are to be continuous without splices between terminals.

Remove existing foundations which are to be abandoned a minimum of one foot (1') below subgrade or two feet (2') below natural ground. This work is considered subsidiary to Item 680, "Installation of Highway Traffic Signals".

When D3-1 signs are required, provide one piece 0.080" (80 mil) thick aluminum alloy sheet sign blank with Type C (High Specific Density) green sign background and Type C (High Specific Density) white letters, border, and/or symbols in accordance with the details shown on the plans.

Initially operate traffic signals at new locations in flash mode until such time as is approved so that phase sequencing may be initiated.

Replace any LEDS that fail during the thirty (30) day test period in a timely manner. Equipment and incidentals necessary for replacement of failed LEDS are considered subsidiary to the various bid Items and will not be paid for directly.

Changes in the locations of poles, conduit, pull boxes, or other items as shown on the plans may be made in those instances deemed necessary, or when requested by the Contractor and approved.

Provide and install signs where required, as shown in the plans. Sign blanks shall be fabricated in accordance with the specifications and in conformance with the Texas "Manual on Uniform Traffic Control Devices", latest edition, and any approved changes thereto.

Supply a TS-2 Type 1 traffic signal controller assembly, verify the controller has ethernet capability, an internal embedded web page (web server) and is I.P. addressable. Provide the controller with the latest firmware release.

All conductor removed during construction shall be the property of the Contractor and is to be disposed of properly.

Sheet

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## **Item 681: Temporary Traffic Signals**

For this project, the proposed traffic signal will be installed and used in the traffic control for respective construction phases as shown in the plans.

Materials and incidentals required to operate the traffic signal during the temporary construction phases will be subsidiary to Item 681.

Materials and incidentals required to switch from the temporary traffic signal phase to the proposed signal operation will also be subsidiary to Item 681.

# **Item 684: Traffic Signal Cables**

Attach permanent non-metallic tags to each signal cable in the access compartment of each signal pole and inside the traffic signal controller cabinet. Conductor (s) and/or cable (s) which connects signal heads to the terminal block will be tagged to indicate which specific signal head is being served. Signal cable at the traffic signal controller cabinet will be tagged to identify separate signal phases. Material, labor, tools, equipment, and incidentals are necessary to perform this work are subsidiary to the various bid Items.

# **Item 686: Traffic Signal Pole Assemblies (Steel)**

Salvage all illumination and traffic signal poles and components. Deliver to: Odessa Traffic Signal Shop at: 3901 E. Hwy 80, Odessa, TX 79761.

#### Item 6079: Automated Portable Smart Traffic Monitoring System

Payment for the portable changeable message sign(s) configured for the Automated Portable Smart Traffic Monitoring System is subsidiary to Item 6079.

# Item 6083: Video Imaging and Radar Vehicle Detection System

Supply Iteris VIVDS/Radar Vehicle Detection cameras, mounting hardware, processors, edge connect module, color monitor, BNC to RCA cable for color monitor, cables for cameras, and suppressors, as well as any components needed to make the system functional. Verify the processors have front panel including video connections, a USB port for optical mouse, CAT 5 extension module, and 4 manual call switches.

The VIVDS processor shall be equipped with a NEMA TS2 Type 1 detector interface. Logic levels shall be compatible with NEMA TS2. Disconnecting and reconnecting of video output cable from one output port to another as a method of switching video monitoring will not be allowed. A toggle switch or multiple monitors shall be required to provide an acceptable method of switching video outputs.

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# Item 6002: Video Imaging Vehicle Detection System

The VIVDS will be tested in a typical intersection application.

VIVDS/Radar detection cameras shall be installed directly to the mast arm in accordance with the details shown in the plans and shall be capable of monitoring 3 to 4 lanes of oncoming traffic utilizing detection zones that accommodate the initial 200 feet of approaching traffic. Detection zone sizes will simulate the operation of a 6' x 6' and a 6' x 40' inductive loop.

The Contractor shall provide ample personnel, equipment and any necessary incidentals to perform testing for detection accuracy, count and flow rate accuracy, speed accuracy, occupancy accuracy and classification accuracy of the VIVDS system in accordance with this Item and as directed by the Engineer.

Install all the following equipment provided by TxDOT and purchased by State Force Account:

# **Video Imaging Vehicle Detection System**

1-ENCOM Radios

1-Flat Panel Antennas

1-Hardened Switches